

Harford County Government

Stormwater Management Construction Inspections

The engineer-in-charge is responsible for conducting site inspections for the construction of the stormwater management facility.

Site Location

The following information is required to be completed by the engineer-in-charge. Failure to submit this information may require part of the facility to be reconstructed. This document is provided to clarify certain requirements of construction and is supplemental to any other requirements imposed by applicable law, rules and regulations.

Pre-Construction Meeting

The engineer-in-charge or his representative and the contractor/superintendent shall attend the pre-construction meeting. The County must be notified in writing immediately, should the engineer-in-charge change during the construction of the stormwater management facility.

Inspection Reports

A daily inspection report shall be completed by the engineer-in-charge or his representative and must include the following information:

- Site location name
- Inspection date
- Name and signature of the inspector
- Daily temperature
- Problems encountered and the subsequent solutions
- Proctor tests and curves, soil classifications, soil gradations with the plasticity index indicated
- Source of materials – example: pipe distributor name; borrow site
- Pipe certification (this may be a shipping ticket or a letter from the manufacturer)
- Principal spillway diameter, gaskets and coupling bands dimensions
- Structure measurements – steel spacing, pipe lengths, mud slab dimensions, riser slab dimensions, etc.
- Principal spillway connections (gasket types and widths); coupling band widths

- PVC diameter, length and schedule type (filter diaphragms)
- Filter diaphragm sand source and gradation; width, depth and length of excavation
- Daily compaction reports
- Pictures as applicable¹

The inspection reports shall be maintained by the engineer-in-charge or his representative throughout the construction of the stormwater management facility. The inspection reports shall be made available upon request by the County who may visit the site periodically during construction. An inspection will be scheduled as soon as the stormwater facility is constructed to ensure all quality control reports are complete and any questions are resolved. The County may issue a stop work order if the engineer-in-charge or his representative is not on site to perform the required construction inspection.

As-Built Submission

The engineer-in-charge shall submit the inspection reports, as-built drawings and computations to the County within thirty (30) days of the completion of the stormwater management facility.

The County will review all submitted material and perform a field inspection of the facility. Comments concerning the submitted documents and the facility will be returned to the engineer-in-charge. After all comments have been addressed the County will recommend acceptance of the facility.

The following information is required as part of the as-built submission:

- Engineer signature, seal, and expiration date on the as-built certification note.
- Check marks if item was installed as designed or necessary changes shown in red.
- If the elevations of the structure differ from the original plan by two-tenths of a foot or more, the excavated volume is less than designed or the hydrology changes, updated TR-55, stage-storage and TR20 computations shall be submitted as applicable.
- Compaction certification from the geotechnical engineer. This will include the compaction of the ground beneath the riser (stability) as well as the fill for the dam.
- Concrete break test results for the riser or weir walls, if cast in place.
- Topsoil test for any earth disturbance greater than 5 acres.
- Elevations supporting rooftop disconnects, drainage flows, etc.
- Plant certified concrete tickets for cradles, headwalls and endwalls (swm structures).
- Inspection reports, soil test results, pipe certification, filter cloth specifications, landscaping tickets, lime and fertilizer application rates, soil type and mix ratios for any facility requiring a planting medium.

¹ Pictures shall be taken during the following constructions phases: 1) pipe installation; 2) riser construction; 3) cut-off trench; 4) anti-seep collars; 5) anti-flotation base for riser; 6) filter diaphragm installation; 7) underground storage pipe/stone placement; 8) pipe connections to riser and/or other modified stormwater structure; 9) hardware cloth placement around dewatering pipes; and 10) filter cloth in underground storage.

We have received and read the above requirements and understand the responsibilities of the engineer-in-charge for the completion of the construction inspections and failure to do so may cause difficulty in as-built approval and/or require parts of the facility to be reconstructed.

Contractor/Superintendent (printed)

Engineer-in-charge (printed)

Signature

Signature

Telephone/Fax Number

Telephone/Fax Number

Email Address

Email Address

Date

Date

Owner/Developer (printed)

Signature

Telephone/Fax Number

Email Address

Date

****If the engineer-in-charge changes, then a change of AUTHORIZATION FORM must be filled out and returned to the Department of Public Works, Stormwater Management.**